

CLAIM AMENDMENTS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A content switch managed by a network provider that routes packets associated with a document to one of a plurality of application providers, wherein each application provider is a trusted customer of the network provider, in a computer based communications system using instructions recorded on a computer-readable storage medium, the storage medium comprising:

instructions in the content switch that send a-the document to a parser, the document referencing a location of a corresponding schema;

instructions in the parser that fetch a-schema-the corresponding schema from the location-associated-with-the packets, wherein the fetched schema comprises:

a plurality of elements, wherein a particular element in the fetched schema is also found in the sent document,

a particular routing rule that redirects the packets to a particular server when a value of the particular element in the sent document matches a predefined value of the particular element in the fetched schema, and containing routing rules, the routing rules

16 a default routing rule that redirects the packets to a default server
17 when the value of the particular element in the sent document does not
18 match the predefined value of the particular element in the fetched schema
19 ~~providing a default action when the document does not match the routing~~
20 ~~rules;~~

21 instructions in the parser that validate the sent document according to the
22 fetched schema;

23 instructions in the parser that pass the validated document to a routing
24 instruction processor;

25 instructions that interpret the routing rules in the schema, wherein the
26 content switch executes the routing rules; and

27 instructions in the content switch that use the interpreted routing rules to
28 redirect the packets associated with the document to a specified ~~either the~~
29 particular server or the default server, ~~wherein: each application provider, defines~~
30 ~~switching policies, and administrative domains of the content switch and~~
31 ~~application servers are separated.~~

1 2. (Previously Presented) The content switch as recited in claim 1, further
2 comprising:

3 instructions that parse Extensible Markup Language (XML).

1 3. (Currently Amended) A method of carrying out content switching ~~in~~for a
2 plurality of application providers in a network provider of a computer-based
3 communications system, wherein each application provider is a trusted customer of
4 the network provider, that uses instructions recorded on a computer-readable
5 storage medium, the medium comprising:

6 instructions that add parsing capabilities to a content switch;

7 instructions that add routing ~~information rules~~ to a schema associated with
8 packets and a document, wherein the schema comprises:

9 a plurality of elements, wherein a particular element in the schema is
10 also found in the document,

11 a particular routing rule that redirects the packets to a particular
12 server when a value of the particular element in the document matches a
13 predefined value of the particular element in the schema, and

14 a default routing rule that redirects the packets to a default server
15 when the value of the particular element in the document does not match the
16 predefined value of the particular element in the schema;

17 ~~the routing information providing a default action when a document does not~~
18 ~~match the routing information;~~

19 instructions that direct the content switch to fetch the schema to determine a
20 the routing action to be taken on the packets associated with athe document

21 | written according to the fetched schema and containing the reference to the fetched
22 | schema, wherein the determination is made by applying the routing rules from the
23 | schema to elements parsed from the document; and

24 | instructions that route the packets according to the determined routing
25 | action, wherein each application provider, as the trusted customer of the
26 | network provider, defines switching policies, and administrative domains of the
27 | content switch and application servers are separated.

1 | 4. (Previously Presented) The method as recited in claim 3, further comprising:
2 | instructions that use Extensible Markup Language (XML).

1 | 5. (Currently Amended) A system that routes traffic to application providers in
2 | a network provider of a computer based communications network using instructions
3 | recorded on a computer-readable storage medium, wherein each application
4 | provider is a trusted customer of the network provider, the medium comprising:

5 | instructions that add parsing capabilities to a content switch;

6 | instructions that add routing information rules to a schema associated with
7 | packets and a document, wherein the schema comprises:

8 | a plurality of elements, wherein a particular element in the schema is
9 | also found in the document,

10 a particular routing rule that redirects the packets to a particular
11 server when a value of the particular element in the document matches a
12 predefined value of the particular element in the schema, and

13 a default routing rule that redirects the packets to a default server
14 when the value of the particular element in the document does not match the
15 predefined value of the particular element in the schema—the routing
16 information providing a default action when a document does not match the
17 routing information;

18 instructions that direct the content switch to fetch the schema, interpret the
19 routing rules in ~~a~~ the document containing the reference to the schema and written
20 ~~according to a~~ in the language of the schema, ~~associated with a packet and~~ apply
21 the routing rules to elements in the network; and

22 instructions that determine a routing action to be performed on the packets
23 from a packet flow associated with the document, wherein~~[[:]]~~ each application
24 provider, as the trusted customer of the network provider, defines switching
25 policies, and administrative domains of the content switch and application servers
26 are separated.

- 1 6. (Previously Presented) The system as recited in claim 5, further comprising:
2 instructions that parse Extensible Markup Language (XML).

7. (Currently Amended) A computer program schema comprising instructions stored on a computer-readable storage medium in a network provider of a computer based communications system, the medium comprising:

instructions that add parsing capabilities to a content switch;

instructions that add routing ~~information-rules~~ to a schema associated with packets and a document, wherein the schema comprises:

a plurality of elements, wherein a particular element in the schema is also found in the document.

a particular routing rule that redirects the packets to a particular server when a value of the particular element in the document matches a predefined value of the particular element in the schema, and

a default routing rule that redirects the packets to a default server when the value of the particular element in the document does not match the predefined value of the particular element in the schema—the routing information providing a default action when a document does not match the routing information;

instructions that enable a particular application provider to specify the routing rules;

instructions that direct the content switch to fetch the schema to provide routing actions to be taken on the packets associated with ~~a-the~~ document

21 | containing the reference to the schema and written in the language of the schema;

22 | and

23 | instructions that route the packets to the application providers, wherein[[:]]

24 | each application provider is a trusted customer of the network provider that defines

25 | switching policies, and administrative domains of the content switch and

26 | application servers are separated.

1 | 8. (Canceled).

1 | 9. (New) The content switch of claim 1, wherein:

2 | the fetched schema comprises a plurality of particular routing rules and a
3 | plurality of predefined values of the particular element in the fetched schema,

4 | each of the particular routing rules redirects the packets to a different server,
5 | and

6 | each of the particular routing rules corresponds uniquely to one of the
7 | predefined values.

1 | 10. (New) The method of claim 3, wherein:

2 | the schema comprises a plurality of particular routing rules and a plurality of
3 | predefined values of the particular element in the schema,

4 each of the particular routing rules redirects the packets to a different server,

5 and

6 each of the particular routing rules corresponds uniquely to one of the
7 predefined values.

1 11. (New) The system of claim 5, wherein:

2 the schema comprises a plurality of particular routing rules and a plurality of
3 predefined values of the particular element in the schema,

4 each of the particular routing rules redirects the packets to a different server,
5 and

6 each of the particular routing rules corresponds uniquely to one of the
7 predefined values.

1 12. (New) The schema of claim 7, wherein:

2 the schema comprises a plurality of particular routing rules and a plurality of
3 predefined values of the particular element in the schema,

4 each of the particular routing rules redirects the packets to a different server,
5 and

6 each of the particular routing rules corresponds uniquely to one of the
7 predefined values.

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